

WIRELESS INDUSTRY BRIEFING

CTIA – The Wireless Association[®]

I. U.S. Wireless Industry Brings Mobile Broadband to Millions of Americans

- Since 2005, mobile wireless has been the fastest growing form of both high-speed lines (over 200 kbps in at least one direction) and advanced service lines (over 200 kbps in both directions). From June 2006-June 2007, 68% of new high-speed subscriptions were wireless. *FCC*
- In the past year, the number of U.S. subscribers with 3G devices has grown 80 percent to 64.2 million users. As of June 2008, 28.4 percent of U.S. subscribers had a 3G device, taking the lead from the five largest countries in Europe (which have a combined population equal to the U.S.) that had a combined 3G penetration rate of 28.3 percent. *comScore*
- According to the FCC, the percentage of mobile subscribers who use their cell
 phones to browse the mobile Web for news and information is slightly higher in
 the United States than in Europe, and a higher percentage of U.S. mobile
 subscribers use their cell phones for mobile web browsing in each individual
 category of information investigated, including sports, news, entertainment, maps
 and directions, financial account access, financial news, business directories and
 travel.
- In December 2007, 84% of English-speaking Hispanics had cell phones, compared to 74% of white Americans, and 71% of African Americans. *Pew Internet & American Life Project* [see Slide 23]
- 90% of Hispanic, 79% of African American, and 73% of White American wireless users have 'done' wireless mobile data; both Hispanics and African Americans use mobile laptops to access the Internet at a greater rate than the average Internet user. *The Pew Internet & American Life Project* [see Slide 23]
- 58% of adults used mobile devices for non-voice data activities, and 41% of adults had logged onto the Internet wirelessly. This means 62% of all Americans have some experience with mobile access to digital data and tools using a handheld wireless device or laptop. *Pew Internet & American Life Project* [see Slide 28]
- There are more than 600 unique wireless handsets / devices for sale to consumers in the United States. Handsets range from simple, voice-only models like the Jitterbug, to multi-function devices like the Apple iPhone, and Smartphones and multi-media devices from companies like LG, Motorola, Nokia, RIM, Samsung and Sony Ericsson. *CTIA*
- By mid-year 2008, there were 116.7 million more wireless connections [262.7 million] than ILEC lines [fewer than 146 million]. *CTIA and USAC* [see Slide 29]
- 15.8% of U.S. households were wireless only as of year-end 2007. NCHS [see Slide 30]
- Wireless substitution is accelerating and could reach almost one-third of households by 2012 "This phenomenon is driven by improved wireless coverage and better pricing and will be supported by new handsets and new wireless technologies." *Morgan Stanley*
- Wireless consumers in the U.S. are paying less today than they did 10 years ago while enjoying almost seven times as many minutes of use per month. FCC and CTIA



- Mobile calls are significantly less expensive on a per minute basis in the United States (\$0.05) than in Western Europe (where revenue per minute averaged \$0.20 in the second quarter of 2008) and Japan (\$0.25). *Merrill Lynch* [see Slide 14]
- Consumers' adoption of wireless service and migration of wireless minutes of use from wireline networks demonstrates the industry's success fueled by the rapid innovation of new technologies and services and on-going capital investment and build-out, including: four "generations" of technology in 25 years; postalized National one-rate plans, products and services consumers desire that no policymaker would ever anticipate (*e.g.*, camera phones, ringtones, and social networks).
- Industry "best practices" that provide consumers a baseline set of expectations for their wireless service, and carrier competition that goes beyond "best practices" to respond to consumer preferences for unlimited night and weekend calling plans, in-network and circle-of-friends calling plans, service plans with graduated ETFs, no-contract service plans, "unlimited" service plans, etc.

II. Wireless Broadband is an Economic Multiplier

- In 2005, 68.8 million US enterprise users had mobile wireless services, with a quarter of them using mobile wireless broadband. By 2016, the U.S. is projected to have 81.9 million mobile enterprise users, with 83 percent using wireless broadband. *Ovum*
- Productivity gains from the accelerated deployment of wireless broadband technologies and applications will generate almost \$860 billion in additional GDP over the next decade. *Ovum* [see Slide 33]
- For example, in 2005, productivity improvements due to use of mobile broadband solutions across the U.S. health care industry were worth almost \$6.9 billion. By 2016, that number is estimated to be \$27.2 billion. *Ovum*
- From 2001 to 2006, wireless carriers together invested an average of \$24.5 billion a year in their networks. *U.S. Census* [see Slide 8]
- In 2007, wireless carriers reported investing more than \$21 billion in their operational networks (not including investments in pre-operational 3G and 4G systems). CTIA

III. Wireless Broadband is an Integral Part of the U.S. Infrastructure and Public Safety Solution

- An estimated 296,000 wireless E-911 calls are made daily across the United States.
- The U.S. wireless industry has transmitted 643 wireless AMBER Alerts since initiating the free service in 2003.
- Wireless carriers reported more cell sites as of June 2008 compared to June 2007, now totaling over 220,472. CTIA [see Slides 5 & 6]
- In order to achieve full 3G mobile broadband coverage, approximately 16,000 new towers will need to be constructed and 55,000 existing towers will need to be augmented with 3G technologies. *CostQuest*

IV. Wireless Infrastructure = Licensed Spectrum + Towers = Broadband

• More licensed spectrum enables more competition, higher speeds, and additional services – the failure to make spectrum available leads to more industry consolidation as carriers merge to obtain sufficient bandwidth to upgrade their networks to provide mobile broadband. [see Slide 16]



- More spectrum triggers jobs and capital investment as carriers build-out their new broadband networks.
- Auctions allow spectrum to be efficiently allocated without placing limits on how much spectrum a company can own, and allow companies to have the spectrum they need to provide broadband services while generating billions of dollars in auction revenues to the U.S. Treasury.
- Additional spectrum could be provided by making AWS-3 spectrum available, converting government spectrum to commercial use, and "refarming" underutilized broadcast and other commercial spectrum.
- A federal policy that facilitates tower siting is critical to the build-out of broadband networks.

V. Wireless Broadband Lifeline Service: Bringing Broadband to the Masses

- The Federal Communications Commission's existing Lifeline program provides subsidized access to basic telecommunications services for Americans who meet needs-based criteria.
- Extension of this successful program to include licensed wireless broadband services will encourage continued expansion of wireless broadband services throughout the United States and will target support to those Americans who need it most.

VI. Wireless Consumers Deserve Clarity and Consistency

- CMRS is a mobile service provided without respect to state boundaries. With "postalized" National one-rate plans and family plans, geographic phone numbers, brick and mortar billing addresses, and the location of the mobile user is no longer is linked to one state.
- State jurisdiction over CMRS is a patchwork quilt only the FCC and federal government have jurisdiction to provide consumers and licensees with a consistent set of expectations.
- Inconsistent state requirements raise carriers' costs with no corresponding benefit to consumers; wireless carriers support uniform rules that are tailored to the needs of wireless consumers.
- While the states may be the laboratories of Democracy, some state experiments
 restricting lawful Internet access and disguising state-mandated taxes and fees as
 carrier rates harm consumers.
- Discriminatory state and local taxation is regressive and unfairly burdens those with the least ability to pay.